I CLAIM:

- 1. A removable back support apparatus for use with a multi-purpose weight lifting machine, said removable back support apparatus comprising a substantially vertically disposed back rest having a front face and a rear face, and said removable back support apparatus further comprising attachment means for removably attaching said back rest to two upright barbell support beams of said multi-purpose weight lifting machine.
- 2. A removable back support apparatus according to claim 1, wherein said attachment means comprises ready attachment means for removably attaching said back rest to said two upright barbell support beams of said multi-purpose weight lifting machine without the use of hand tools.
- 3. A removable back support apparatus according to claim 2, wherein said ready attachment means comprises one or more transverse cross members, with each of said cross members respectively in a fastened relation with said substantially vertically disposed back rest, and with one or more of said cross members removably attachable to said two upright barbell support beams without the use of hand tools.
- 4. A removable back support apparatus according to claim 3, wherein, in said fastened relation, a respective horizontal center portion of each of said cross members is securely fastened

to said rear face of said back rest by one or more rear face fasteners.

- A removable back support apparatus according to claim 4, wherein said one or more transverse cross members comprise two or more transverse cross beams, so as to define at least an upper and a lower transverse cross beam.
- 6. A removable back support apparatus according to claim 5, wherein each of said cross beams is of a length equal to or greater than a distance between said two upright barbell support beams of said multi-purpose weight lifting machine.
- 7. A removable back support apparatus according to claim 6, wherein said length of each of said cross beams is greater than said distance between said two upright barbell support beams of said multi-purpose weight lifting machine.
- 8. A removable back support apparatus according to claim 7, wherein each of said cross beams respectively has left and right extremity portions, and wherein said upper transverse cross beam further comprises two pins, with each of said two pins projecting in a rearward and slightly downward direction from each of said left and right extremity portions of said upper transverse cross beam, such that each of said pins is removably hookable into one of a plurality of apertures in each of said two upright barbell support beams of said multi-purpose weight lifting machine, and such that said upper transverse cross beam

is removably attachable to said two upright barbell support beams without the use of hand tools.

- 9. A removable back support apparatus according to claim 8, wherein said front face of said back rest is covered with a padded material for engaging and comfortably supporting the back of a user.
- 10. A removable back support apparatus according to claim 9, wherein said one or more rear face fasteners comprise two or more hexagonally headed threaded bolts.